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GENERAL COUNSEL

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SC PUBLIC SERVICE
COMMISSION

February 10, 2005

Mr. Charles L.A. Terreni
Chief Clerk/Administrator
South Carolina Public Service Commission
101 Executive Center Dr., Suite 100
Columbia, SC 29210

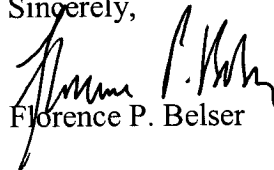
Re: Application of Midlands Utility, Inc. for an approval of New Schedule of Rates and Charges for Sewage Service provided to its customers in Richland, Lexington, Fairfield and Orangeburg Counties.
PSC Docket No.: 2004-297-S

Dear Charles:

Enclosed for filing please find twenty-six copies of direct testimony for the following Office of Regulatory Staff witnesses: Dawn Hipp, Willie Morgan, and Roy Barnette. Please date stamp the extra copy enclosed and return it to me via person delivery same.

Please let me know if you have any questions.

Sincerely,



Florence P. Belser

FPB/cc
Enclosures

cc: Charles Cook, Esquire

BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA
DOCKET NO. 2004-297-S


IN RE: Application of MIDLANDS)
UTILITIES, INC. for an Approval)
Of New Schedule of Rates and)
Charges For Sewage Service)
Provided to its Customers in)
Richland, Lexington, Fairfield and)
Orangeburg Counties.)
_____)

CERTIFICATE OF SERVICE

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This is to certify that I, Cindy Clary, an employee with the Office of Regulatory Staff, have this date served one (1) copy of the Direct Testimony and Exhibits of: Dawn M. Hipp, Willie J. Morgan, and Roy Barnette in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

Charles Cook, Esquire
Elliott & Elliott, P.A.
721 Olive Street
Columbia, South Carolina 29205


Cindy Clary

February 10, 2005
Columbia, South Carolina

172727

THE OFFICE OF REGULATORY STAFF
DIRECT TESTIMONY AND EXHIBITS
OF
WILLIE J. MORGAN

RECEIVED
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COMMISSION



RETURN DATE: _____
SERVICE: OK DBQ

DOCKET NO. 2004-297-S
MIDLANDS UTILITY, INC.
APPLICATION FOR RATE INCREASE
TEST YEAR ENDED DECEMBER 31, 2003

TESTIMONY OF WILLIE J. MORGAN**FOR****THE OFFICE OF REGULATORY STAFF****DOCKET NO. 2004-297-S****IN RE: MIDLANDS UTILITY, INC.**

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**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND
OCCUPATION.**

A. My name is Willie J. Morgan, and my business address is 1441 Main Street, Suite 300, Columbia, South Carolina 29201. I am employed by the state of South Carolina, Office of Regulatory Staff (ORS) as the Program Manager for the Water and Wastewater Department.

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND
EXPERIENCE.**

A. I received a Bachelor of Science Degree in Engineering from the University of South Carolina in 1985 and a Master of Arts Degree in Management from Webster University in 2000. I am a licensed Professional Engineer registered in the state of South Carolina. My professional affiliations are as a member of the American Water Works Association (AWWA) and the South Carolina Section of the American Water Works Association (SC-AWWA). After graduation from the

1 University of South Carolina, I was employed by the South Carolina Department
2 of Health and Environmental Control (DHEC) as an Environmental Engineer
3 Associate. Later, I was promoted to the position of Permitting Liaison where I
4 assisted industries and the public with environmental permitting requirements in
5 the state of South Carolina. This assistance included providing information about
6 air quality, solid and hazardous waste management, and water and wastewater
7 management requirements. I was employed by DHEC for nineteen years. On
8 October 2, 2004, I joined the Office of Regulatory Staff as the Program Manager
9 for the Water and Wastewater Department.

10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY INVOLVING**
11 **MIDLANDS UTILITY, INC. FOR THIS PROCEEDING?**

12 **A.** The purpose of my testimony is to set forth my findings and the ORS staff's
13 findings relative to a review of the rate increase application submitted by
14 Midlands Utility, Inc. ("MUI") and the on-site audit. Specifically, I will focus on
15 the facility's engineering and planned construction activities, environmental
16 compliance issues, 208 Plan relationship, and depreciation.

17 **Q. ARE YOUR FINDINGS AND THE ORS STAFF'S FINDINGS SET FORTH**
18 **IN YOUR TESTIMONY AND ATTACHED EXHIBITS?**

19 **A.** Yes.

20 **Q. PLEASE EXPLAIN HOW YOU COMPILED INFORMATION FOR YOUR**
21 **REVIEW.**

22 **A.** I used information provided by MUI in its application, data request responses, and
23 information gathered through on-site visits. I further consulted with and used

1 information from DHEC, wastewater treatment facility vendors, the National
2 Association of Regulatory Utility Commissioners (NARUC), and the Central
3 Midlands Council of Governments ("COG"). Using this information, ORS staff
4 determined the amount of additional operating revenues that would be produced
5 by the proposed rates. Also, we were able to obtain a better understanding of
6 MUI's loan agreement, system design structure, and utility needs.

7 **Q. PLEASE EXPLAIN EXHIBIT WJM-1 AND WJM-2 OF YOUR REPORT.**

8 A. Exhibit WJM-1, is a schematic showing the location of the three wastewater
9 treatment facilities (WWTFs) and the various wastewater collection facilities that
10 are owned and operated by MUI. MUI is owned by Mr. Keith Parnell and Mr.
11 Charles K. Parnell. Also, the Parnells own two other wastewater utilities,
12 Development Service, Inc. (DSI) and Bush River Utilities, Inc. (BRUI). MUI
13 customers are mainly residential customers. However, there are several
14 commercial customers on its systems as well. MUI has facilities in Richland,
15 Lexington, Orangeburg, and Fairfield Counties. As shown in Exhibit WJM-2,
16 MUI's systems in Orangeburg and Fairfield Counties are all wastewater collection
17 systems that discharge collected wastewater to the local municipal systems for
18 treatment. Also, MUI has three wastewater collection systems in Lexington
19 County. The Vanaressdale subdivision area in Lexington County discharges its
20 collected wastewater to Carolina Water Service, Inc. for treatment. MUI
21 discharges the collected wastewater from the other two collection systems to the
22 City of Cayce which provides treatment. The three WWTF that are owned by
23 MUI are located in Richland (1) and Lexington (2) Counties.

1 Q. PLEASE EXPLAIN EXHIBIT WJM-3 OF YOUR REPORT.

2 A. Exhibit WJM-3, consisting of two pages, is the depreciation schedule for the
3 assets obtained or owned by MUI during the July 1, 2003 through June 30, 2004
4 test year. The depreciation service life for several items on the list has expired.

5 Q. PLEASE EXPLAIN THE MAJOR ASSETS ASSOCIATED WITH MUI.

6 A. MUI's major assets include its wastewater collection lines and pump stations in
7 Richland, Lexington, Orangeburg, and Fairfield Counties, treatment systems in
8 Richland and Lexington Counties, and the office building and storage shed in the
9 Town of Lexington. The office building houses the laboratory for minor
10 wastewater testing and is used by both MUI and BRUI. Miscellaneous items
11 include several trucks, pressure truck, backhoe, computers, chemical feed system,
12 and an emergency generator. While several of the assets were purchased and
13 mainly used by MUI, they are also used for operations associated with the other
14 two companies owned by the Parnells, DSI and BRUI. Also, there are several
15 items that were purchased by DSI and BRUI that are used by MUI. As an
16 example, the down payment for a trencher was made by MUI. However, the
17 remaining cost for the trencher was paid for by BRUI even though the asset is
18 mainly used by MUI.

19 Q. WHAT SERVICE LIFE DO YOU ATTRIBUTE TO THESE ASSETS?

20 A. The service life should be based on the useful life of a piece of equipment and
21 should not be related to a financing period. In a previous case involving MUI's
22 sister companies DSI and BRUI, the Commission rejected a proposal by DSI and
23 BRUI for an accelerated plant depreciation of 20 years and instead allowed the

1 BRUI utility plant to be depreciated over a 50-year life period. See, Commission
2 Order No. 96-44 (January 19, 1996), Docket No. 94-727-S – Application of
3 Development Service, Inc. for Approval of an Increase in Rates and Charges for
4 Sewer Service and Docket No. 94-728-S – Application of Bush River Utilities,
5 Inc. for Approval of an Increase in Rates and Charges for Sewer Service. MUI
6 has proposed that the depreciation schedule for its existing WWTFs have a 20-
7 year service life period. MUI proposed that the force and gravity sewer lines have
8 a 15-year service life period and that the new proposed plants have a 25-year
9 service life period. We recommend that the gravity sewer lines be capitalized and
10 depreciated over a 45-year average service life period and that the force sewer
11 lines be capitalized and depreciated over a 30-year average service life period.
12 ORS recommends that the existing WWTFs cost be capitalized and depreciated
13 over a 32-year average service life period and also that any new WWTFs cost be
14 capitalized and depreciated over a 32-year average service life period. ORS has
15 concerns with the depreciation schedule for several other items identified in the
16 MUI application. In addition, it should be noted that the specific location and use
17 of several items acquired by MUI could not be verified or identified. The ORS
18 complete schedule for average service life depreciation is outlined in the schedule
19 presented in Exhibit WJM-3. The ORS recommendations are based on the
20 conclusions outlined in the Florida Public Service Commission Water and
21 Wastewater System Regulatory Law as recommended by the NARUC staff. ORS
22 approach and conclusions made concerning depreciation are consistent with the
23 Public Utility Depreciation Practices manual as published by NARUC in 1996 as

1 compiled by the Staff Subcommittee on Depreciation of the Finance and
2 Technology Committee.

3 **Q. PLEASE EXPLAIN EXHIBIT WJM-5 OF YOUR REPORT.**

4 A. Exhibit WJM-5, consisting of twelve pages, sets forth a summary of both the
5 collection and treatment systems inspected by ORS.

6 **Collection Systems**

7 MUI currently provides adequate wastewater collection service to its residential
8 and commercial customers. The only deficiency identified during this portion of
9 the inspection is the need to include the area code on the signs with the
10 emergency telephone number that is located on the fence for the pump stations
11 located in Orangeburg and Fairfield Counties. There is neither construction
12 activity being proposed by MUI for its collection portion of its systems nor is
13 there an immediate need for an upgrade or reconstruction of the collection portion
14 of the systems.

15 **Treatment Systems**

16 Inspections of the treatment portions of the systems which discharge treated
17 wastewater to either a sprayfield or surface water bodies revealed the following
18 deficiencies:

19 **Bellemeade in Lexington County**

- 20 1. The WWTF is under a consent order with DHEC for NPDES (SC0030988)
21 violations. It exceeded the permitted discharge limits for ammonia-nitrogen
22 (NH₃-N), biochemical oxygen demand (BOD), dissolved oxygen (DO), fecal
23 coliform bacteria (FC), pH and total residual chlorine (TRC).

1 Raintree Acres/Dutch Creek in Richland County

- 2 2. The WWTF is under a consent order with DHEC for NPDES (SC0039055)
- 3 violations. It exceeded the permitted discharge limits for biochemical oxygen
- 4 demand (BOD), Flow, and fecal coliform bacteria (FC). Also, it failed to
- 5 properly sample for pH and dissolved oxygen (DO) on a daily basis and fail to
- 6 operate and maintain the WWTF in accordance with the NPDES permit.

7 Windy Hill in Lexington County

- 8 3. The berm surrounding the lower sprayfield unit is breached near the center of
- 9 the sprayfield adjacent to the fence. The breached area appears to have been
- 10 caused by continuing erosion that has gone unrepaired by MUI. See Exhibit
- 11 WJM-6. This breach could allow overflow of any excess effluent sprayed in
- 12 this area of the sprayfield. The berm should be repaired as soon as possible.
- 13 4. Virginia pine trees planted along the berms are limiting the evaporation
- 14 process within the sprayfield. Some of the trees are over 30 feet tall and are
- 15 providing shade over a large portion of the three sprayfield units. See Exhibit
- 16 WJM-7. The excessive shade reduces the function of the sprayfield by
- 17 limiting evaporation. Undergrowth, encroaching along the edges of the
- 18 sprayfield units, is also reducing the function of the sprayfield. See Exhibit
- 19 WJM-8. The pine trees should be cut and the undergrowth should be removed
- 20 to allow the sprayfield to function properly.
- 21 5. The WWTF is under a consent order with DHEC for violating its Land
- 22 Application Permit (ND0067075). It exceeded the permitted discharge limit
- 23 for biochemical oxygen demand (BOD).

1 Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF HOW THE
2 PROPOSED NEW TREATMENT SYSTEMS WILL BE CONSTRUCTED?

3 A. Currently, the existing treatment systems are not meeting the limits in their
4 National Pollutant Discharge Elimination System (NPDES) permits. This
5 problem may be due to poor operations and maintenance and/or design problems
6 restricting the units from being able to meet the permit limits. To remedy this
7 situation, MUI has chosen to use the Sequential Batch Reactor (SBR) technology
8 for each of these WWTFs. The proposed disinfection units to be installed in
9 conjunction with the SBRs are Ultra Violet (UV) disinfection type systems.

10 In an effort to achieve compliance with the DHEC Consent Orders (03-043-W,
11 03-044-W, and 03-048-W) and to consistently meet the limits in its NPDES
12 permits and the Land Application Discharge permit, MUI indicated that it did not
13 explore options for addressing its compliance problems. A thorough cost analysis
14 should have been reviewed to determine the best alternative for meeting the
15 various permit conditions for MUI's WWTFs. To determine the best alternative
16 relative to the cost impact on the customers of MUI, all options should have been
17 explored in detail. However, MUI produced no cost analyses. ORS is, therefore,
18 unable to conclude that the proposed upgrades are the best option for MUI or its
19 customers.

20 Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF THE COSTS THAT
21 WOULD BE ASSOCIATED WITH THE NEW PROPOSED UPGRADES
22 TO MUI'S WWTFs.

1 A. At the time of this testimony, the proposed upgrades to the three WWTFs owned
2 and operated by MUI were in various stages of approval with DHEC. MUI has
3 not provided a copy of its proposed or DHEC-approved plans to our office for
4 review for any of the proposed upgrades. This information was requested as part
5 of ORS' data requests. Therefore, it is impossible to attach a reasonable cost
6 projection for the construction work that is proposed by MUI. However, ORS has
7 outlined a depreciation schedule for the loan agreement associated with the
8 proposed construction for MUI by backing out the BRUI proposed construction
9 costs and closing costs for the total loan amount. This schedule of service life is
10 outlined in Exhibit WJM-4. It should be noted that this amount does not coincide
11 with the cost estimate provided by Mr. Keith Parnell in his prefiled direct
12 testimony. The loan agreement amount after considerations of the BRUI's
13 upgrade is \$1,007,530 for MUI. Mr. Parnell's prefiled direct testimony states
14 \$1,582,000 is the amount needed for construction upgrades to MUI's WWTFs.
15 The MUI's data request response to question 1.5 concerning the amount needed
16 for construction upgrades states that approximately \$1,000,000 is needed for
17 construction upgrades. Moreover, there is no information to determine the total
18 cost of the separate WWTFs or their individual components. In addition, other
19 factors that are brought forward by DHEC and ORS as the planning and approval
20 process for the upgrades proceed may alter the costs. Some of these issues are
21 listed below:

22 Bellemeade in Lexington County

1 Mr. Keith Parnell advised ORS that the preliminary engineering report (PER) was
2 submitted on February 1, 2005, to DHEC by MUI. This document has yet to be
3 approved by DHEC. A construction permit application for the design of the new
4 system must be submitted and approved by DHEC before construction can be
5 initiated. Without an approved construction permit, MUI cannot begin to attribute
6 any projected cost to the construction of the proposed WWTF. Furthermore, ORS
7 is concerned that the current discharge point into the ditch may need to be moved
8 further downstream. The existing stream flow in the ditch receiving the effluent
9 from the WWTF is very shallow and may even dry up completely during dry
10 periods. In order to meet permit limits, the discharge point may need to be moved
11 further downstream. This change would add further cost to the proposed upgrade.

12 Raintree Acres/Dutch Creek in Richland County

13 Mr. Murali Koppa with DHEC advised ORS that on January 31, 2005, MUI
14 submitted PER revisions to DHEC. This document was approved by DHEC on
15 February 3, 2005. A construction permit application for the design of the new
16 system must be submitted and approved by DHEC before construction can be
17 initiated. Without an approved construction permit, MUI cannot begin to
18 reasonably project the cost of the construction for the proposed WWTF.

19 Windy Hill in Lexington County

20 DHEC has approved the PER and the construction permit for the proposed new
21 WWTF. The construction permit was approved by DHEC on January 25, 2005.
22 However, ORS has not received any detailed or overall cost estimates for this
23 WWTF upgrade. In addition, ORS has not received a copy of the approved

1 construction plans from MUI as requested in its Data Request. However, from
2 discussions with Mr. Keith Parnell and the data request response received by ORS
3 on February 8, 2005, ORS is informed that the WWTF upgrade will include an
4 "UV" disinfection type system. It appears that the current
5 chlorination/dechlorination disinfection system is working adequately, and the
6 WWTF was not cited by DHEC in the consent order for not meeting FC or TRC
7 limits. Violations of FC or TRC limits are problems that would be associated
8 with inadequate wastewater disinfection treatment. While the proposed "UV"
9 type of disinfection system could be effective, it is imperative that MUI properly
10 maintain the treatment process and control the level of its total suspended solids
11 ("TSS") in the wastewater that passes through the unit. Because of concerns
12 related to the current management practices, I am apprehensive about whether
13 MUI should be allowed to expend revenue generated from customers on a system
14 that requires efforts to remove such high levels of solids. An alternative
15 disinfection method would be continuing use of the existing
16 chlorination/dechlorination system. This is a proven method that is utilized by
17 most WWTFs in South Carolina, and the unit is already in place and appears to be
18 functioning properly. Because the existing disinfection portion of the treatment
19 system appears to be functioning properly, the ORS staff has not been shown that
20 a new disinfection system is needed. Some upgrades are needed, but ORS cannot
21 recommend or agree to all upgrades requested. Therefore, ORS recommends that
22 the Commission not approve rates to allow MUI to expend customer revenue on
23 expenditures for unnecessary upgrades.

1 Consequently, ORS concludes that the construction cost is not known or
2 measurable. If the Commission finds that certain adjustments are prudent relative
3 to the proposed construction, then ORS can review such relevant information
4 once MUI makes proper submission.

5 **Q. DO YOU HAVE ANY ADDITIONAL RECOMMENDATIONS?**

6 A. MUI should explore the potential use of the state's tax credit for pollution control
7 equipment (See, S.C. Code Ann. Section 12-37-220(A)) and the state's tax credit
8 for the construction or improvement of an infrastructure (See, S.C. Code Ann.
9 Section 12-6-3420). Use of these tax credits could help to reduce the overall cost
10 of any upgrades to MUI's WWTFs, thus reducing the burden of new construction
11 on MUI's customers.

12 In addition, potential cost savings may be obtained by utilizing an open bidding
13 process to allow multiple vendors to submit proposals for upgrading the MUI
14 WWTFs. MUI should not rely solely on HPG and Company, the consulting firm
15 of Mr. Charles K. Parnell, and a single proposal for addressing the needs of its
16 WWTFs upgrades. Multiple options should be considered from other capable
17 contractors and vendors who are not affiliated with MUI before agreeing on a
18 proposal.

19 Further, MUI should pursue alternative disposal methods (i.e., land application,
20 recycling, etc.) for its sludge management method. DHEC has a Center for Waste
21 Minimization (CWM) that can assist with this effort. The CWM is a free, client-
22 oriented advisory service promoting the voluntary implementation of waste
23 minimization by companies in South Carolina. The CWM is a non-regulatory

1 technical assistance program established to help business and industry identify
2 waste reduction and recycling opportunities.

3 These efforts can help to reduce MUI's construction and operating cost. There it
4 would reduce the burden of rate increases on its customers.

5 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

6 **A.** Yes it does.

DIRECT EXHIBITS
OF
WILLIE J. MORGAN

DOCKET NO. 2004-297-S
MIDLANDS UTILITY, INC.
APPLICATION FOR RATE INCREASE
TEST YEAR ENDED DECEMBER 31, 2003

EXHIBIT INDEX OF THE WATER/WASTEWATER DEPARTMENT

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2004-297-S

MIDLANDS UTILITY, INC.

WILLIE J. MORGAN TESTIMONY

<u>EXHIBIT NO.</u>	<u>EXHIBIT TYPE</u>	<u>PREPARED BY</u>
WJM-1	MUI WWTFs and Collection Lines Locations	DHEC
WJM-2	List of various MUI WWTFs and Collection Lines	ORS
WJM-3	Depreciation Service Life Schedule	ORS
WJM-4	Loan Depreciation Service Life Schedule	ORS
WJM-5	WWTFs and Collection Lines Inspection Reports	ORS
WJM-6	Windy Hill Sprayfield Photograph – Breached Berm	ORS
WJM-7	Windy Hill Sprayfield Photograph – Virginia Pines	ORS
WJM-8	Windy Hill Sprayfield Photograph – Undergrowth	ORS

EXHIBIT WJM-1

Map of West Virginia showing county boundaries and names. The map is oriented with the state's outline. County names are labeled within their respective boundaries. Some counties are highlighted in white, including Hancock, Putnam, Boone, Logan, Lincoln, Wayne, and Mingo. Other counties are shaded in dark gray, including Cabell, Boone, Logan, Lincoln, Wayne, and Mingo. The map is titled 'EXHIBIT WJM-1' in the top left corner.

*** - Midlands Utility, Inc.
WWTFs & Collection
Systems**

MIDLANDS UTILITY, INC. WWTFs AND COLLECTION SYSTEMS

Subdivision	County	System Type	MUI DHEC Permit #	Treatment Facility	MUI Collection System/WWTF Address
1 Arbogate	Lexington	Collection	SSS0000043	City of Cayce	SE/S of Fish Hatchery Rd.
2 Bellemeade	Lexington	WWTF	SC0030988	Midlands Utility, Inc.	N SIDE KONICA CT
3 Charwood	Lexington	Collection	SSS0000043	City of Cayce	SE/S of Fish Hatchery Rd.
4 Dutch Creek	Richland	WWTF (Raintree Acres)	SC0039055	Midlands Utility, Inc. (Raintree/Dutch Creek)	
5 Fox Glen	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
6 Henwood	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
7 Mallard Trace	Lexington	Collection	SSS0000043	City of Cayce	SE/S of Fish Hatchery Rd.
8 Montclair	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
9 Northwood Estates	Orangeburg	Collection	Not Issued	Orangeburg Department of Public Utilities	1817 Northwood Dr.
10 Parkwood	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
11 Quinton Commons	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
12 Raintree Acres	Richland	WWTF	SC0039055	Midlands Utility, Inc. (Raintree/Dutch Creek)	
13 Rockford Place	Lexington	Collection	SSS0000043	City of Cayce	SE/S of Fish Hatchery Rd.
14 Royal Hills	Fairfield	Collection	Not Issued	Town of Winnsboro	6 miles north of Winnsboro near Adger to the left of Hwy 321
15 Stonewood	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
16 Timberland	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
17 Vanarsdale	Lexington	Collection	Not Issued	Carolina Water Service, Inc.	S SIDE INT TO LANDER & ALLENDALE DR.
18 Westgate	Lexington	Collection	SSS0000043	City of Cayce	Whispering Glen Cir & S. Woodside Pwy
19 Windy Hill	Lexington	WWTF	ND0067075	Midlands Utility, Inc.	S. Side of Crosshill Rd.

MIDLANDS UTILITY, INC
ASSET DEPRECIATION SERVICE LIFE SCHEDULE
FOR THE TEST YEAR ENDED JUNE 30, 2004

	Date Acquired	Description	Amount \$	Service Life #	Location of Asset
1	Jul-78	Utility Plant (FL#354)	124,500	32	Detailed Location & Use Description Unavailable
2	Jan-80	Pumps Pipe MTS (FL#380)	64,429	15	Detailed Location & Use Description Unavailable
3	May-80	PVC Pipe (FL#360)	1,776	30	Detailed Location & Use Description Unavailable
4	Aug-80	PVC Pipe (FL#360)	3,589	30	Detailed Location & Use Description Unavailable
5	Mar-86	Pipe & Lines (FL#360)	89,659	30	Detailed Location & Use Description Unavailable
6	Aug-86	Flow Meter (FL#364)	3,087	5	Detailed Location & Use Description Unavailable
7	Feb-87	Lines & Pump Station (FL#354)	55,490	25	Detailed Location & Use Description Unavailable
8	Sep-87	Fully Depreciated	1,484,661	FD	Item Identification Unavailable
9	Jan-88	Fully Depreciated	13,912	FD	Item Identification Unavailable
10	Apr-88	Flow Meter (FL#364)	6,758	5	Bellemeade (Cayce- Lex. County)
11	May-88	Concrete Fencing (FL#354)	1,254	25	Arborgate (Cayce- Lex. County)
12	Jan-91	6 Mile Utility (FL#360) forced	42,666	30	West Columbia
13	Aug-91	Pump Motors (FL#380) 2 pumps	23,213	15	West Columbia
14	Nov-91	Sewer Lines (FL#360)	19,473	30	Detailed Location & Use Description Unavailable
15	Dec-91	Sewer Lines (FL#360)	15,801	30	Detailed Location & Use Description Unavailable
16	Dec-91	Pump (FL#380)	840	15	Detailed Location & Use Description Unavailable
17	Mar-92	6 Mile Creek Line (FL#361) gravity	161,243	45	West Columbia
18	Jul-92	Lines Easement (FL#352)	11,107	40	Detailed Location & Use Description Unavailable
19	Nov-92	Fully Depreciated	8,822	FD	Item Identification Unavailable
20	Mar-93	Line Addition (FL#360)	8,814	30	Detailed Location & Use Description Unavailable
21	Jan-94	Flooring Office (FL#398)	3,243	10	MUI Office
22	Oct-94	Arborgate (FL#360) forced	4,254	30	Arborgate (Cayce- Lex. County)
23	Feb-95	Fully Depreciated	135,510	FD	Item Identification Unavailable
24	Jul-95	AC Office (FL#390)	3,260	15	MUI Office
25	Jul-95	Parkwood Pump Station (FL#354) 2 pumps	10,958	25	Parkwood (West Cola.-Lex. County)
26	Nov-95	Vanarsdale (FL#361) gravity	14,997	45	Vanarsdale (West Cola.-Lex. County)
27	Oct-96	Copier (FL#390)	3,670	8	MUI Office
28	Nov-96	Sewer TAPS (FL#389) Vanarsdale to Carolina Water System	63,000	FD	Vanarsdale (West Cola.-Lex. County)
29	Nov-96	Computer (FL#390)	2,341	6	MUI Office
30	Dec-96	Off & Lab EQ (FL#394)	21,686	15	MUI Office
31	Feb-97	Pressure Truck (FL#391)	67,543	6	MUI Office
32	Feb-97	Backhoe (FL#395)	25,850	12	MUI Office
33	Feb-97	Chemical Feed System (FL#380) @Bellemeade	16,735	18	Bellemeade (Cayce- Lex. County)

34	Oct-97	6 IN O Ring CL160 PVC SDR 26 (FL#371)	19,505	18	Detailed Location & Use Description Unavailable
35	Nov-99	Pumps-Orangeburg (FL#371)	20,685	18	Orangeburg County
36	Dec-99	Flow Meter (FL#364) <i>Orangeburg</i>	2,779	5	Orangeburg County
37	Jan-00	Down Payment on Trencher (FL#395) Not a Computer	5,000	12	Home in Calhoun County
38	Jan-00	Control Panel-Orangeburg (FL#371)	6,042	18	Orangeburg County
39	Mar-00	Pipe-Winnsboro (FL#360) <i>forced</i>	18,021	30	Fairfield County
40	May-00	TAPS - Orangeburg (FL#389)	18,250	FD	Orangeburg County
41	May-00	Boring Tool (FL#397)	8,080	15	MUI Office
42	Nov-00	Lines-Winnsboro (FL#360) <i>forced</i>	11,263	30	Fairfield County
43	Jan-02	Computer - Dell Computer (FL#390)	1,158	6	MUI Office
44	Mar-03	Computer - Microprice PC (FL#390)	1,148	6	MUI Office
45	Aug-03	Benshaw Drive-Hobgood Electric & Machinery (FL#371)	5,197	18	Cayce - Lex. County
46	Dec-03	Pump-Interstate Utilities Sales (FL#380)	1,771	15	Detailed Location & Use Description Unavailable
47	Feb-04	Teco Motor-Electric Motor and Repair (FL#380)	534	15	Detailed Location & Use Description Unavailable
48	Mar-04	Pump-Electric Motor and Repair (FL#380)	3,393	15	Detailed Location & Use Description Unavailable
49	Mar-04	Sewage Pump-Hughes Supply (FL#380)	844	15	Detailed Location & Use Description Unavailable
50	Apr-04	Pump-Pete Duty & Associates (FL#380)	1,092	15	Detailed Location & Use Description Unavailable
51	May-04	Casing-Vaughan (FL#389)	1,031	18	Detailed Location & Use Description Unavailable
52	May-04	Pump-Hughes Supply (FL#380)	2,828	15	Detailed Location & Use Description Unavailable
53	Jul-99	Trencher owned by BRUI (FL#395)	45,426	12	Home in Calhoun County
54	Jun-02	Truck - 94 Ford F250 owned by DSI (FL#391)	23,249	6	Used by Keith Parnell
55	Oct-03	CAT Backhoe owned by DSI (FL#395)	53,550	12	Home in Calhoun County
56	Oct-03	CAT Generator owned by DSI (FL#395)	37,000	12	Cayce - Lex. County
57	Oct-06	MUI Closing Cost	66,727	32	Loan for upgrade
58	Oct-06	MUI Loan Amount for Construction Upgrade	1,007,530	32	Proposed upgrade for MUI
Totals			<u>3,876,244</u>		

FD = Fully Depreciated

**MIDLANDS UTILITY, INC./DEVELOPMENT SERVICE, INC./BUSH RIVER UTILITIES, INC.
DEPRECIATION SERVICE LIFE FOR LOAN AGREEMENT FUNDS
UTILITY PLANT UPGRADES**

		Amount	Depreciation Service Life (Years)
BB&T Loan		2,021,400	
Loan	Bush River Utility, Inc.	8,913	32
Closing	Development Service, Inc.	5,953	32
Cost	Midlands Utility, Inc.	66,727	32
Bush River Utility, Inc. upgrade cost		932,278	32
Midlands Utility, Inc. upgrade cost		1,007,530	32
Midlands Utility, Inc. upgrade cost in data response (approximately)		1,000,000	32
Keith Parnell's Testimony for cost of Midlands Utility, Inc. upgrades		1,582,000	32



ORS WASTEWATER SYSTEM INSPECTION

Utility Name: Midlands Utility, Inc. - Windy Hill Number of Customers: 135

System Type: Collection and Treatment System Date Inspected: 1/26/05

Inspected By: Willie Morgan/Dawn Hipp - Office of Regulatory Staff

Company Representative: Keith Parnell

Type of Plant: Collection and Biological Treatment System with Sprayfield

Extent of Treatment: Biological Treatment with Sprayfield Discharge using an NPDES no discharge permit (ND0067075)

System Components Inspected	Yes	No
Chlorinator	X	
Other Chemicals in Use Sulfur Dioxide	X	
Aerators	X	
Plant fenced and Locked	X	
Warning Signs Visible	X	
Holes in Fence		X
Erosion of Dikes ¹	X	
Odor		X
Grass Cut	X	
Duck Weed or Algae	X	
Grease Build Up		X
Debris inside of Plant ³		X
Color of Effluent ² :	Clear	
Lift Stations: Number Not Applicable	N/A	N/A
Failure Warning System	X	
Electric Wiring Acceptable	X	
Overflows ^{1, 3}		X
Condition of Access Road: Good/Fair/Bad	Good	
New Construction		X

Frequency Checked by Licensed WWTF Operator: 1/day; 365 days/year

Location of Utility Office: 816 East Main Street, Lexington, SC 29072

Location of System: Collection and Treatment System located in Lexington County servicing the Windy Hill Subdivision.

Subdivision provided water by this Utility: No

ORS WASTEWATER SYSTEM INSPECTION CONTINUED

Comments: This is a collection and treatment system that collects wastewater from residential customers and treats the wastewater prior to spraying on an adjacent sprayfield.

Footnotes:

1. The berm surrounding the lower sprayfield unit is breached near the center of the sprayfield adjacent to the fence. This would allow an overflow of any excess effluent sprayed in this area of the sprayfield. The berm should be repaired as soon as possible.
2. The WWTF is under a consent order with DHEC for NPDES violations. It exceeded the permitted discharge limit for biochemical oxygen demand (BOD).
3. Virginia pine trees planted along the berms are limiting the evaporation process within the sprayfield. Some of the trees are over 30 feet tall and is providing shade over a large portion of the three sprayfield units. The excessive shade reduces the function of the sprayfield by limiting evaporation. Also, undergrowth is encroaching along the edges of the sprayfield units. This is also reducing the function of the sprayfield. The pine trees should be cut and the undergrowth should be removed to allow the sprayfield to function properly.



ORS WASTEWATER SYSTEM INSPECTION

Utility Name: **Midlands Utility, Inc. - Bellemeade** Number of Customers: **-148**

System Type: **Collection and Treatment System** Date Inspected: **1/25/05**

Inspected By: **Willie Morgan/Dawn Hipp - Office of Regulatory Staff**

Company Representative: **Keith Parnell**

Type of Plant: **Collection and Biological Treatment System**

Extent of Treatment: **Biological Treatment with Surface Water Discharge using NPDES permit (SC0030988)**

System Components Inspected	Yes	No
Chlorinator	X	
Other Chemicals in Use Sodium Dioxide	X	
Aerators	X	
Plant fenced and Locked	X	
Warning Signs Visible	X	
Holes in Fence		X
Erosion of Dikes		X
Odor		X
Grass Cut	X	
Duck Weed or Algae	X	
Grease Build Up	X	
Debris inside of Plant		X
Color of Effluent:	Clear	
Lift Stations: Number 1 (inside fence @WWTF)	X	
Failure Warning System	X	
Electric Wiring Acceptable	X	
Overflows		X
Condition of Access Road: Good/Fair/Bad	Good	
New Construction		X

Frequency Checked by Licensed WWTF Operator: **1/day; 365 days/year**

Location of Utility Office: **816 East Main Street, Lexington, SC 29072**

Location of System: **Collection and Treatment System located in Lexington County servicing an area south of the City of Cayce off US 321.**

Subdivision provided water by this Utility: **No**

ORS WASTEWATER SYSTEM INSPECTION CONTINUED

Comments: This is a collection and treatment system that collects wastewater from residential and a few commercial customers and treats the wastewater prior to discharge into an unnamed tributary.

Footnotes:

4. The WWTF is under a consent order with DHEC for NPDES violations. It exceeded the permitted discharge limits for ammonia-nitrogen (NH₃-N), biochemical oxygen demand (BOD), dissolved oxygen (DO), fecal coliform bacteria (FC), pH and total residual chlorine (TRC).



ORS WASTEWATER SYSTEM INSPECTION

Utility Name: Midlands Utility, Inc. - Fox Glen, etc. Number of Customers: ~412

System Type: Collection System Date Inspected: 10/12/04

Inspected By: Willie Morgan/Dawn Hipp - Office of Regulatory Staff

Company Representative: Keith Parnell

Type of Plant: Collection System w/Pump Station

Extent of Treatment: Discharge to City of Cayce

System Components Inspected	Yes	No
Chlorinator	NA	NA
Other Chemicals in Use	NA	NA
Aerators	NA	NA
Plant fenced and Locked	NA	NA
Warning Signs Visible	X	
Holes in Fence		X
Erosion of Dikes	NA	NA
Odor		X
Grass Cut	X	
Duck Weed or Algae	NA	NA
Grease Build Up	NA	NA
Debris inside of Plant	NA	NA
Color of Effluent:	NA	NA
Lift Stations: Number: 2	X	
Failure Warning System	X	
Electric Wiring Acceptable	X	
Overflows		X
Condition of Access Road: Good/Fair/Bad	Good	
New Construction		X

Frequency Checked by Licensed WWTF Operator: 1/day; 365 days/year

Location of Utility Office: 816 East Main Street, Lexington, SC 29072

Location of System: Collection System located in Lexington County servicing an area on the west side of the City of Cayce, SC mainly along US HWY1 past I-26.

Subdivision provided water by this Utility: No

Comments: This is a collection system that collects wastewater from residential and few commercial customers and pumps the wastewater to the City of Cayce.



ORS WASTEWATER SYSTEM INSPECTION

Utility Name: Midlands Utility, Inc. - Northwood Estates Number of Customers: 71

System Type: Collection System Date Inspected: 1/26/05

Inspected By: Willie Morgan/Dawn Hipp - Office of Regulatory Staff

Company Representative: Keith Parnell

Type of Plant: Collection System w/Pump Station

Extent of Treatment: Discharge to Orangeburg Dept. of Public Works

System Components Inspected	Yes	No
Chlorinator	NA	NA
Other Chemicals in Use	NA	NA
Aerators	NA	NA
Plant fenced and Locked	NA	NA
Warning Signs Visible ¹	X	
Holes in Fence		X
Erosion of Dikes	NA	NA
Odor		X
Grass Cut	X	
Duck Weed or Algae	NA	NA
Grease Build Up	NA	NA
Debris inside of Plant	NA	NA
Color of Effluent:	NA	NA
Lift Stations: Number: 2	X	
Failure Warning System	X	
Electric Wiring Acceptable	X	
Overflows		X
Condition of Access Road: Good/Fair/Bad	Good	
New Construction		X

Frequency Checked by Licensed WWTF Operator: 1/day; 365 days/year

Location of Utility Office: 816 East Main Street, Lexington, SC 29072

Location of System: Collection System located in Orangeburg County servicing an area on the south side of the City of Orangeburg, SC

Subdivision provided water by this Utility: No

ORS WASTEWATER SYSTEM INSPECTION CONTINUED

Comments: This is a collection system that collects wastewater from residential customers and pumps the wastewater to the Orangeburg Dept. of Public Utility.

Footnotes:

5. The telephone number listed on the signs for persons to call in case of an emergency needs to be changed to include the area code. These signs are located on the fence around the pump stations in the Northwood Subdivision. The location of the pump station is outside of the local calling area for the existing number that is on the sign for callers to use in case of an emergency.



ORS WASTEWATER SYSTEM INSPECTION

Utility Name: Midlands Utility, Inc. - Raintree Acres/Dutch Creek Number of Customers: ~312

System Type: Collection and Treatment System Date Inspected: 1/26/05

Inspected By: Willie Morgan/Dawn Hipp - Office of Regulatory Staff

Company Representative: Keith Parnell

Type of Plant: Collection and Biological Treatment System w/Pump Station

Extent of Treatment: Biological Treatment with Surface Water Discharge using NPDES permit (SC0039055)

System Components Inspected	Yes	No
Chlorinator	X	
Other Chemicals in Use: Sodium Dioxide	X	
Aerators: 2 on system; only 1 operating	X	
Plant fenced and Locked	X	
Warning Signs Visible	X	
Holes in Fence		X
Erosion of Dikes		X
Odor		X
Grass Cut	X	
Duck Weed or Algae	X	
Grease Build Up	X	
Debris inside of Plant		X
Color of Effluent ¹ :	Clear	
Lift Stations: Number 2	X	
Failure Warning System	X	
Electric Wiring Acceptable	X	
Overflows		X
Condition of Access Road: Good/Fair/Bad	Good	
New Construction		X

Frequency Checked by Licensed WWTF Operator: 1/day; 365 days/year

Location of Utility Office: 816 East Main Street, Lexington, SC 29072

Location of System: Collection and Treatment System located in Richland County servicing the Raintree Acres and Dutch Creek Subdivisions.

Subdivision provided water by this Utility: No

ORS WASTEWATER SYSTEM INSPECTION CONTINUED

Comments: This is a collection and treatment system that collects wastewater from residential customers and treats the wastewater prior to discharge into the Broad River.

Footnotes:

6. The WWTF is under a consent order with DHEC for NPDES violations. It exceeded the permitted discharge limits for biochemical oxygen demand (BOD), Flow, and fecal coliform bacteria (FC). Also, it failed to properly sample for pH and dissolved oxygen (DO) on a daily basis and fail to operate and maintain the WWTF in accordance with the NPDES permit.



ORS WASTEWATER SYSTEM INSPECTION

Utility Name: Midlands Utility, Inc. - Royal Hills Number of Customers: 37

System Type: Collection System Date Inspected: 1/26/05

Inspected By: Willie Morgan/Dawn Hipp - Office of Regulatory Staff

Company Representative: Keith Parnell

Type of Plant: Collection System w/Pump Station

Extent of Treatment: Discharge to Town of Winnsboro

System Components Inspected	Yes	No
Chlorinator	NA	NA
Other Chemicals in Use	NA	NA
Aerators	NA	NA
Plant fenced and Locked	NA	NA
Warning Signs Visible ¹	X	
Holes in Fence		X
Erosion of Dikes	NA	NA
Odor		X
Grass Cut	X	
Duck Weed or Algae	NA	NA
Grease Build Up	NA	NA
Debris inside of Plant	NA	NA
Color of Effluent:	NA	NA
Lift Stations: Number: 2	X	
Failure Warning System	X	
Electric Wiring Acceptable	X	
Overflows		X
Condition of Access Road: Good/Fair/Bad	Good	
New Construction		X

Frequency Checked by Licensed WWTF Operator: 1/day; 365 days/year

Location of Utility Office: 816 East Main Street, Lexington, SC 29072

Location of System: Collection System located in Fairfield County servicing an area on the north side of the City of Winnsboro, SC

Subdivision provided water by this Utility: No

ORS WASTEWATER SYSTEM INSPECTION CONTINUED

Comments: This is a collection system that collects wastewater from residential customers and pumps the wastewater to the Town of Winnsboro.

Footnotes:

7. The telephone number listed on the signs for persons to call in case of an emergency needs to be changed to include the area code for callers to use. These signs are located on the fence around the pump stations in the Royal Hills Subdivision. The location of the pump station is outside of the local calling area for the existing number that is on the sign for callers to use in case of an emergency.



ORS WASTEWATER SYSTEM INSPECTION

Utility Name: **Midlands Utility, Inc. - Vanarssdale** Number of Customers: **-412**

System Type: **Collection System** Date Inspected: **1/25/05**

Inspected By: **Willie Morgan/Dawn Hipp - Office of Regulatory Staff**

Company Representative: **Keith Parnell**

Type of Plant: **Collection System w/Pump Station**

Extent of Treatment: **Discharge to Carolina Water Service**

System Components Inspected	Yes	No
Chlorinator	NA	NA
Other Chemicals in Use	NA	NA
Aerators	NA	NA
Plant fenced and Locked	NA	NA
Warning Signs Visible	X	
Holes in Fence		X
Erosion of Dikes	NA	NA
Odor		X
Grass Cut	X	
Duck Weed or Algae	NA	NA
Grease Build Up	NA	NA
Debris inside of Plant	NA	NA
Color of Effluent:	NA	NA
Lift Stations: Number: Not Applicable	N/A	N/A
Failure Warning System	X	
Electric Wiring Acceptable	X	
Overflows		X
Condition of Access Road: Good/Fair/Bad	Good	
New Construction		X

Frequency Checked by Licensed WWTF Operator: **1/day; 365 days/year**

Location of Utility Office: **816 East Main Street, Lexington, SC 29072**

Location of System: **Collection System located in Lexington County servicing an area on the west side of the City of West Columbia, SC**

Subdivision provided water by this Utility: **No**

Comments: **This is a collection system that collects wastewater from residential and few commercial customers and pumps the wastewater to Carolina Water Service.**

EXHIBIT WJM-6

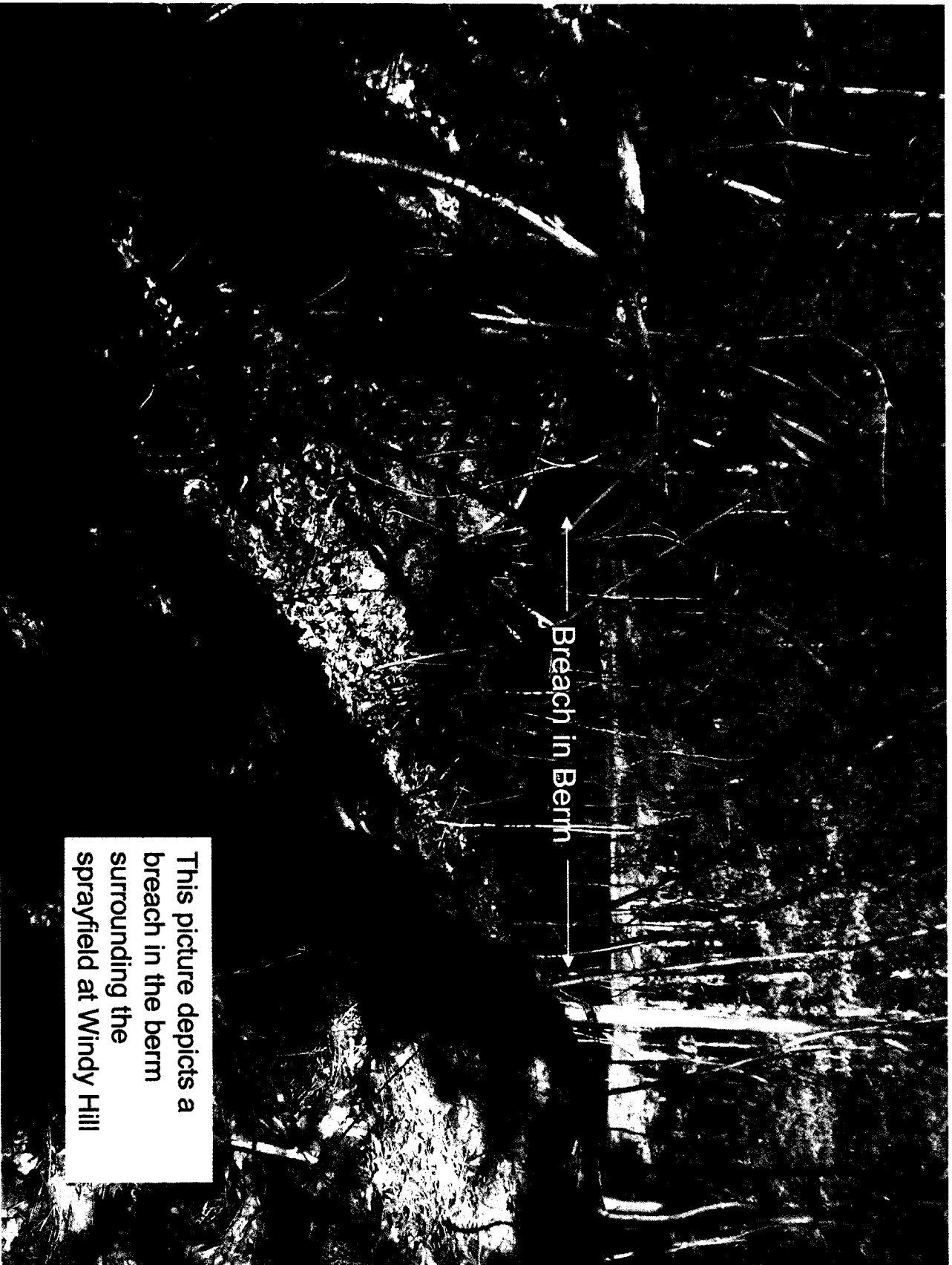
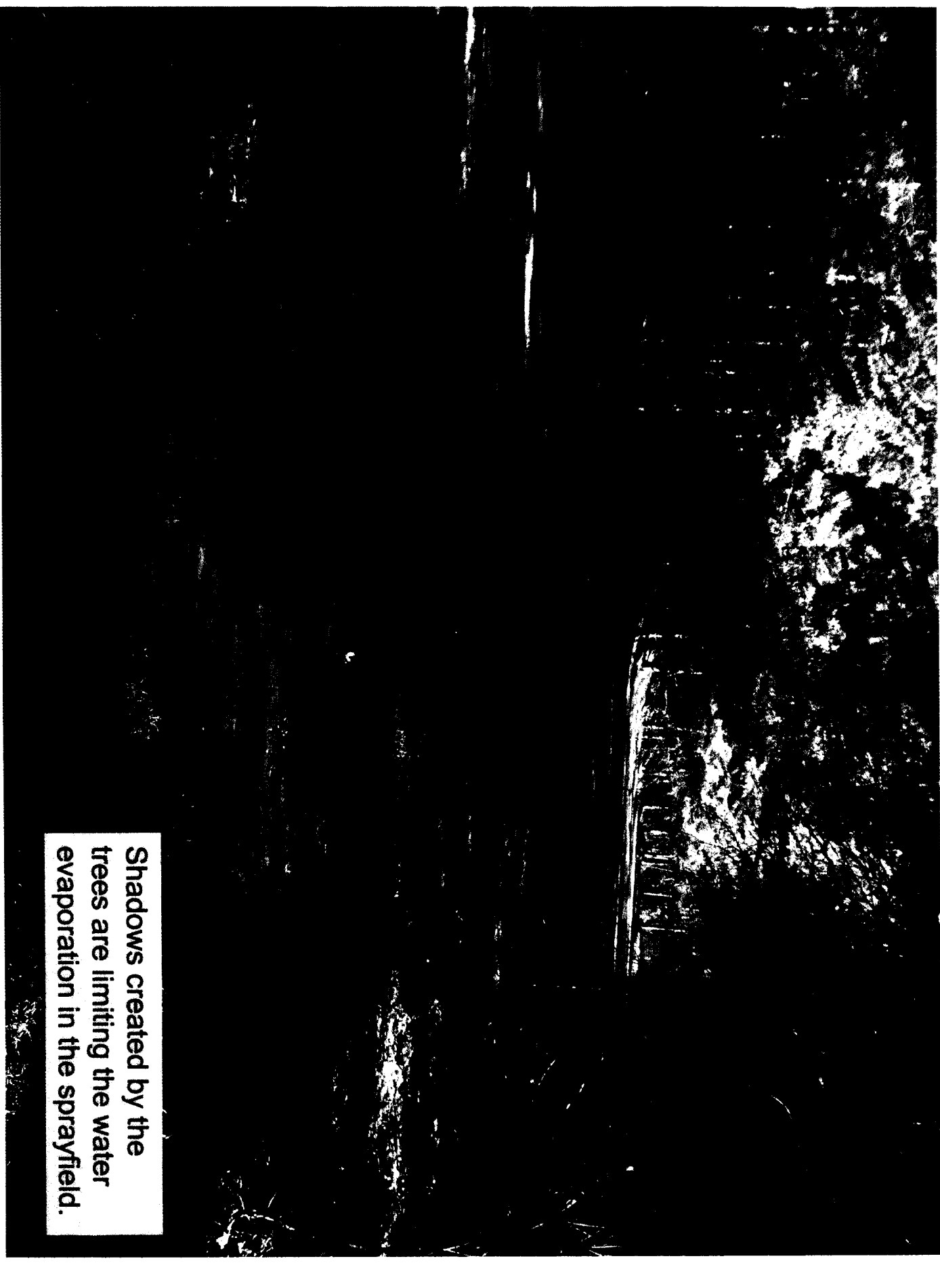
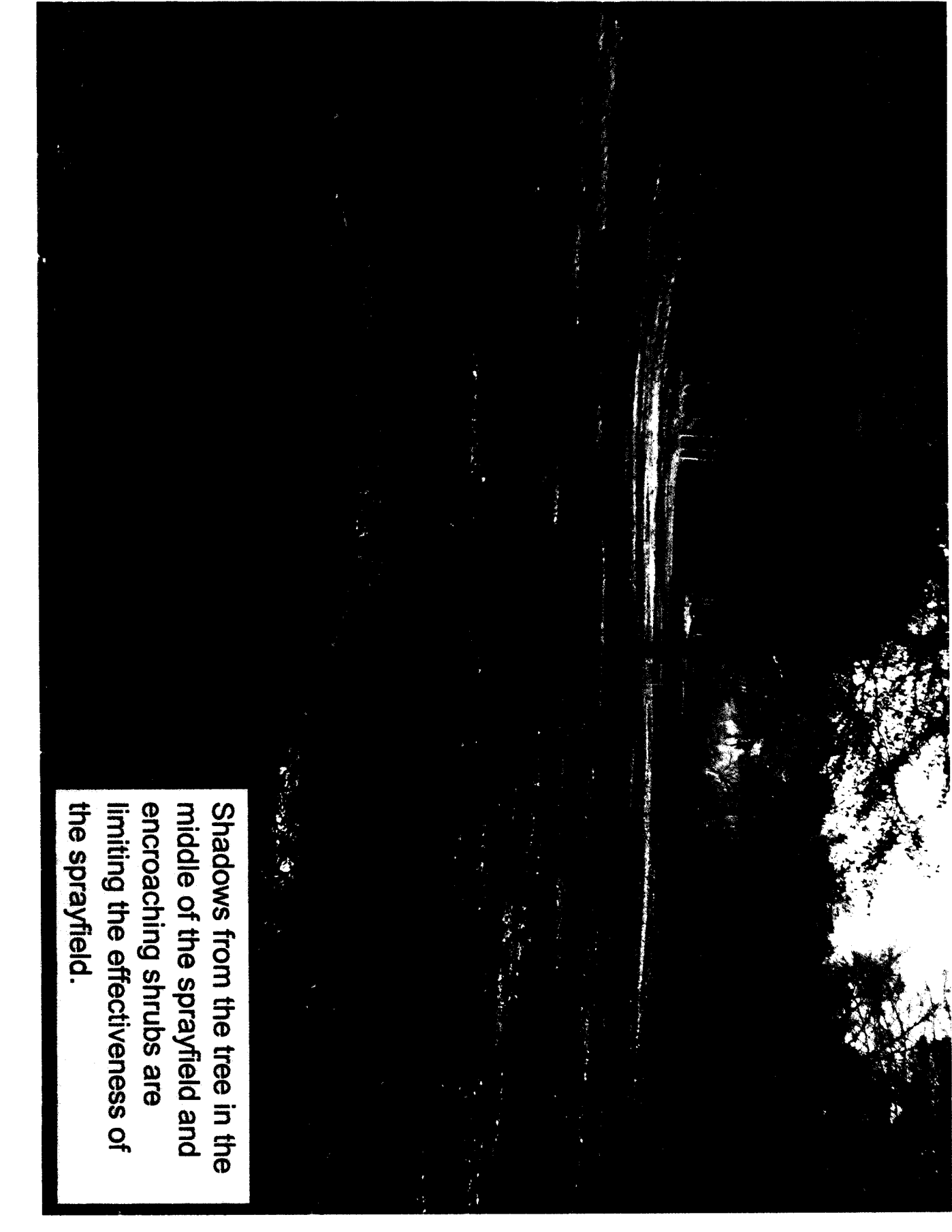


EXHIBIT WJM-7



Shadows created by the
trees are limiting the water
evaporation in the sprayfield.

EXHIBIT WJM-8



Shadows from the tree in the middle of the sprayfield and encroaching shrubs are limiting the effectiveness of the sprayfield.